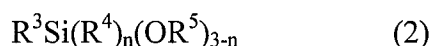
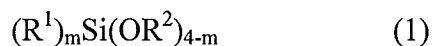


### **REMARKS/ARGUMENTS**

Claims 1-2, 4-12 and 14-16 are pending. Independent Claims 1 and 11 have been amended to recite that R<sup>1</sup> represents a straight chain or branched alkyl group having 1 to 7 carbons or an aryl group wherein the alkyl or aryl group may be substituted or non-substituted. Support for this amendment is found at page 9, lines 19-22 of the specification. Independent Claims 1 and 11 have also been amended to recite that wherein the one or more alkoxy silanes represented by Formula (1) comprise one or more tetraalkoxy silanes wherein m=0 and one or more alkoxy silanes wherein m=1, 2 or 3. Support for this amendment is found on page 13, lines 13-15 and Example 4. Applicants respectfully request entry of these claim amendments.

#### ***The Claimed Invention***

As currently claimed, independent Claims 1 and 11 recite, respectively, a composition for forming a porous film (Claim 1) and a semiconductor device comprising an internal porous film (Claim 11) comprising one or more alkoxy silanes represented by Formula (1) and one or more alkoxy silanes represented by Formula (2):



The one or more alkoxy silanes represented by Formula (1) comprise one or more tetraalkoxy silanes wherein m=0 and one or more alkoxy silanes wherein m=1, 2, or 3. Further, said one or more alkoxy silanes represented by Formula (2) are present in an amount of 0.01 to 10 parts by weight to 100 parts by weight of said one or more alkoxy silanes represented by Formula (1).

#### ***Rejections under 35 U.S.C §102(b)***

A claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. Accordingly, the "identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Both references cited as being anticipatory fail to disclose each and every element of the currently claimed invention. In particular, neither reference

discloses the addition of one or more alkoxysilanes represented by Formula (1) comprising one or more tetraalkoxysilanes wherein  $m=0$  and one or more alkoxysilanes wherein  $m=1, 2, \text{ or } 3$ .

Claims 1-2, and 4-10 stand rejected under 35 U.S.C §102(b) as being anticipated by U.S. Patent No. 6,387,453 to Brinker et al. (hereinafter "Brinker"). Brinker discloses a combination of a precursor sol of a tetraethylorthosilicate (TEOS) and an interstitial compound of hexadecyltrimethoxysilane. Brinker does not disclose or suggest the addition of one or more alkoxysilanes of Formula (1) wherein  $m=1, 2, \text{ or } 3$ . Unlike Brinker, currently amended independent Claim 1 recites one or more tetraalkoxysilanes of Formula (1) wherein  $m=0$  and one or more alkoxysilanes of Formula (1) wherein  $m=1, 2, \text{ or } 3$ . Therefore, Brinker does not disclose each and every element of the currently claimed invention and Applicants request withdrawal of this rejection.

Claims 11-12, and 13-16 stand rejected under 35 U.S.C §102(b) as being anticipated by JP 2002/030249 to Egami et al. (hereinafter "Egami"). Egami discloses a liquid comprising at least one silicon compound selected from the group consisting of alkoxysilanes of the general formula (I):  $X_nSi(OR)_{4-n}$ . Egami also discloses in paragraph [0015] that examples of alkoxysilanes of general formula (I) include octyl trimethoxysilane and octyl triethoxysilane. Similar to Brinker, Egami fails to disclose or suggest the addition of one or more alkoxysilanes of Formula (1) wherein  $m=1, 2, \text{ or } 3$  as recited in Claim 11. Additionally, Egami also does not disclose or suggest any relative amounts of alkoxysilanes represented by Formula (2) with respect to alkoxysilanes represented by Formula (1), and certainly fails to teach or suggest the relative concentration set forth in independent Claim 11 wherein the one or more alkoxysilanes represented by Formula (2) are present in an amount of 0.01 to 10 parts by weight to 100 parts by weight of said one or more alkoxysilanes represented by Formula (1). Therefore, Egami does not disclose each and every element of the currently claimed invention.

### ***Rejections under 35 U.S.C §103(a)***

To establish a *prima facie* case of obviousness the prior art references must teach or suggest all claim limitations. Accordingly, the Office has not established a *prima facie* case of

obviousness because the references cited do not teach or suggest each and every claimed limitation.

Claims 11-12, and 14-16 stand rejected under 35 U.S.C §103(a) as being unpatentable over U.S. Publication No. 2002/0132908 to Yagihashi et al. (hereinafter "Yagihashi") in view of Brinker. On page 6 of the Office Action dated September 28, 2006, the Office appears to imply that Yagihashi does not teach or suggest the claimed solution by stating: "The prior art [Yagihashi] fails to teach a semiconductor device containing an interlayer of a porous film formed from a coating composition per the claim-11." The Office then relies on Brinker for teaching the recited composition. As discussed above, Brinker does not disclose or suggest the addition of one or more alkoxysilanes of Formula (1) wherein  $m=1, 2$ , or  $3$  as recited in Claim 11. Therefore, Brinker does not overcome the deficiencies of the teachings of Yagihashi and Applicants request withdrawal of this rejection.

Claims 11-12, and 14-16 stand rejected under 35 U.S.C §103(a) as being unpatentable over Egami in view of Brinker. As indicated above, both Brinker and Egami fail to disclose or suggest a porous film formed from a mixture wherein one or more alkoxysilanes represented by Formula (1) comprising one or more tetraalkoxysilanes wherein  $m=0$  and one or more alkoxysilanes wherein  $m=1, 2$  or  $3$  as recited in Claim 11. As such, neither Brinker nor Egami teach or suggest a semiconductor as currently claimed and Applicants request withdrawal of this rejection.

### ***Conclusion***

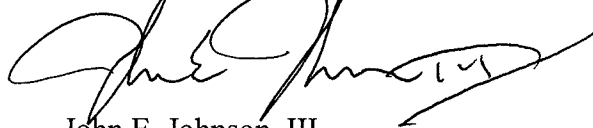
In view of the foregoing amendments and remarks made above, Applicant submits that the pending claims are in condition for allowance. Applicant respectfully requests that the claims be allowed to issue. If the Examiner wishes to discuss the application or the comments herein, the Examiner is urged to contact the undersigned.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required

Application No.: 10/706,861  
Amendment Dated January 29, 2007  
Reply to Office Action of September 28, 2006

therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John E. Johnson, III", written over a horizontal line.

John E. Johnson, III  
Registration No. 58,367

**Customer No. 00826**  
**ALSTON & BIRD LLP**  
Bank of America Plaza  
101 South Tryon Street, Suite 4000  
Charlotte, NC 28280-4000  
Tel Charlotte Office (704) 444-1000  
Fax Charlotte Office (704) 444-1111  
LEGAL02/30234766v1

**ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON JANUARY 29, 2007.**